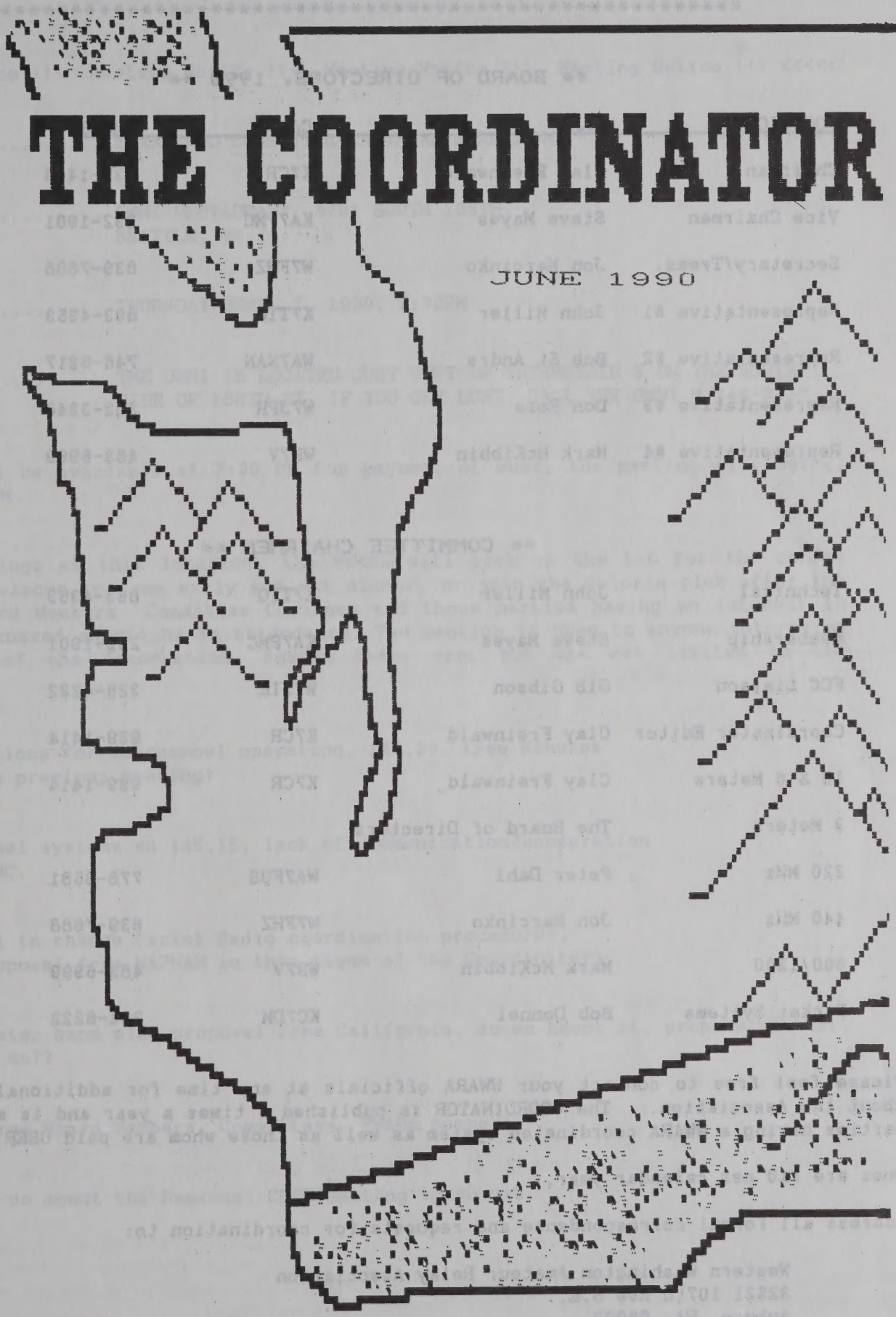
WWARA THE COORDINATOR

JUNE 1990



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* THE WESTERN WASHINGTON AMATEUR RELAY ASSOCIATION  *
*   SERVING REPEATER OWNERS AND USERS SINCE 1976    *
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** BOARD OF DIRECTORS, 1990 **

POSITION	NAME	CALL	PHONE
Chairman	Clay Freinwald	K7CR	939-1414
Vice Chairman	Steve Mayes	KA7PMC	232-1901
Secretary/Treas.	Jon Marcinko	W7FHZ	839-7688
Representative #1	John Miller	K7TTQ	893-4353
Representative #2	Bob St Andre	WA7NAN	746-6217
Representative #3	Don Rose	W7JPH	362-3240
Representative #4	Mark McKibbin	WR7V	483-6999

** COMMITTEE CHAIRMEN **

Technical	John Miller	K7TTQ	893-4353
Membership	Steve Mayes	KA7PMC	232-1901
FCC Liaison	Gib Gibson	W7JIE	226-4222
Coordinator Editor	Clay Freinwald	K7CR	939-1414
10 & 6 Meters	Clay Freinwald	K7CR	939-1414
2 Meters	The Board of Directors		
220 MHz	Peter Dahl	WA7FUS	778-3581
440 MHz	Jon Marcinko	W7FHZ	839-7688
900/1200	Mark McKibbin	WR7V	483-6999
Packet Systems	Bob Donnel	KC7DM	364-6222

Please feel free to contact your WWARA officials at any time for additional information about the Association. The COORDINATOR is published 6 times a year and is mailed to all parties having a WWARA coordinated system as well as those whom are paid USER members.

Dues are $10 per calendar year.

Address all formal correspondence and requests for coordination to:

Western Washington Amateur Relay Association
32521 107th Ave S.E.
Auburn, WA. 98002

>>>>> Meeting Notice !!! Meeting Notice !!! Meeting Notice !!! Meeting Notice !!! <<<<<

WHAT? ..... BOARD AND COMMITTEE CHAIRMAN'S MEETING

WHERE? ..... OMNI RESTAURANT 4701 SOUTH 188TH,
SEATTLE, WA.

WHEN? ..... THURSDAY JUNE 7, 1990, 7:30PM

DIRECTIONS ..... THE OMNI IS LOCATED JUST WEST OF INTERSTATE 5 ON THE SOUTH SIDE OF 188TH ST. IF YOU GET LOST, CALL THE OMNI @ 246-3283

The Treasurer will be available at 7:00 PM for payment of dues, the meeting will being, promptly at 7:30 PM.

Per previous meetings at this location, the WWARA will pick up the tab for the coffee ONLY!! You are welcome to come early and eat dinner, or join the calorie club after the meeting. All Board Members Committee Chairmen and those parties having an interest in matters to be discussed should be in attendance. The meeting is open to anyone interested in the business of the Association. Agenda items are, but are not limited to the following:

1. Applications for co-channel operation, 145.23. (See Minutes from the previous meeting)

2. Co-channel systems on 145.15, lack of communication/cooperation with ORRC.

3. Proposal to change Packet Radio coordination procedures. (See proposal from WA7NAN in this issue of the Coordinator)

4. New 6 meter band plan proposal from California, do we adopt it, propose another, what to do??

5. Items from Board Members, Committees, WWARA members.

6. What to do about the Regional CRCC meeting in August.

VE EXAMINATION SCHEDULE FOR THE PUGET SOUND AREA...(RCT Loggers Bark)

1st Saturday	10 AM	North Seattle CC, Room 3343, 9600 College Way North, Seattle - Mike Mitchell, W7WHT, 282-1438
2nd Friday	7 PM	Shoreline Senior Citizen Center, 835 NE 155th Seattle - Bob Rogers, WN7V, 788-3129
2nd Saturday	9 AM	1st Presbyterian Church, Rockefeller and Wall, Everett - Loren Hole, KK7M, 355-2141
2nd Saturday	10 AM	Riverside Inn, Interurban Ave, Tukwila Mary Lewis, W7QGP, 523-9117
3rd Tuesday	7 PM	Auburn Fire Station, 1101 D St NE. Auburn Henry Heritage, NK7E, 474-6145
3rd Saturday	1 PM	Good Neighbor Center, 305 South 43rd, Renton Mike Dinkelman, WA7UVJ, 854-4031
3rd Saturday		Every 4th month, in Aberdeen Nick Bender, NX7W, 249-4671
4th Saturday	930 AM	Olympic College, Room T-111, Bremerton Dave Brooks, 876-3120
Quarterly	10 AM	Radio Club of Tacoma, 1249 South Washington Jerry Seligman, W7BUN, 845-7652

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1990 SUMMER HAMFEST CALENDAR

JUNE 1-3	NW Division Convention, Seaside, Oregon.
June 2-3	Wenatchee Hamfest, Apple City ARC, Wenatchee, WA.
July 27-29	Northwest DX Convention, Portland, Oregon
August 1	WWARA GENERAL BUSINESS MEETING, RIVERSIDE INN, TUKWILA.
August 3-5	WIMU '90, Jackson, Wyo.
August 11	Central Oregon Hamfest, Bend, Oregon
Sept 22-23	Walla Walla Valley ARC Hamfest, Milton Freewater, Or.

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CO-CHANNEL DATA AND VOICE??...K7CR

At a recent meeting of the WWARA the matter of co-channel operation of systems operating with different modes came up and once again the concept was rejected. We do have Data repeaters coordinated amongst the voice systems here in this area, something that would not even be thought of on the East coast.

In a recent meeting in Orlando, Fla. FCC private radio bureau chief Ralph Haller suggested that Packet radio systems might co-exist with voice systems, on the same channel because the data packets could be transmitted between the analog transmissions. Keep in mind that this would be in the 150 MHz COMMERCIAL spectrum.

ATV-FM COMPATIBILITY ..K7CR

If you will recall the WWARA and ORRC debated the matter of ATV operation on 440 MHz and its compatibility with FM operations. In the April/May issue of the ARRL's Repeater Coordinators Newsletter the matter was dealt with in detail in a submission by John Gebuhr, WB0CMC.

In his summary John states..."QRM between co-channel AATV and FM is 98% unilateral. Such sharing in a region is undesirable and should be avoided wherever possible. Where such sharing is a fact, all parties, ATVers, FM operators and the Frequency Coordinator should try and reach an equitable solution where problems exist.

If you'd like a copy of John's report, drop a line to the WWARA and request same.

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SOUTHERN CALIFORNIA ADOPTS A NEW 6 METER BAND PLAN....K7CR

In typical California fashion at a meeting in Anaheim, Ca. on March 31, at a meeting sponsored by the Southern California Repeater and Remote Base Assn (SCRBBA) representatives from all of Southern California's 6 meter user groups the assembled not only discussed what to do with the new spectrum allocated for repeater activity on 6 meters (51-52MHz) they "went all the way" and adopted a band plan and coordinated systems into the newly created channels.

A number of 6 meter users here in this area recently met with a goal of coming up with a "suggested" band plan or two. This group recommended a wide spaced band plan, much like the present 220 band plan, ie, have repeater inputs and outputs spaced widely (1.5 or 1.7 MHz) and provide compatibility with the existing ARRL band plan by permitting the output frequencies of the existing systems remain the same. This plan was transmitted to the Southern Cal. group for consideration at their meeting.

The California group did agree with two of our technical considerations, that is the input/output spacing should not be the same as any standard broadcast stations frequency to avoid the potential of IMD, further the I/O spacing should be an odd number to avoid IMD with FM broadcast operations.

The direction taken in California was quite different...instead of having one wide band plan (like 220) they opted for a plan more like 2 meters, ie, a modular approach dividing the 51-54 MHz repeater spectrum into three 1 MHz blocks. Within each block repeaters will operate on EVEN numbered frequencies with 500 KHz I/O spacing, in low and out high.

They, in their action, elected not to submit the matter of a new band plan to a national referendum, as had been the desire of our local group, prior to local commitment to a plan.

The question for this area is one of choices:

1. Adopt the Southern California plan.
2. Adopt a plan of our own.
3. Submit a plan of ours to the Country and press for a national debate.
4. Adopt what ever plan is eventually adopted by the ARRL or others.
5. Do nothing, stay with the plan we have now.

This matter will be debated at the next WWARA Board meeting, your input is invited.

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INVITATION FOR NEWS ITEMS

Your editor would like to have news items about your repeater system for inclusion into the Coordinator. If you have installed a new controller, antenna, have a regular meeting of your group, please share with the rest of us....

Drop a note to the WWARA and we will take it from there, or you can give me a call with the info...or if you'd like you can FAX it to the editor at 623-7677.

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COORDINATION POLICIES INCLUDED

This issue of the Coordinator contains a copy of the WWARA Coordination Policies. This document sets out the guidelines as to how the WWARA performs its coordinating task.

Please save this document for future reference.

Should you have a suggestion as to how these policies could be improved the WWARA would like to hear from you. There is always room for improvement, contact any of the WWARA officers with your ideas, or come to a meeting, you count!!!

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PROPOSAL TO CHANGE PACKET COORDINATION POLICIES, A PROPOSAL....WA7NAN

Quite some time ago the WWARA decided that it did not know enough about Packet Radio to be able to perform adequately in the role of frequency coordinator. So, the WWARA handed the responsibility over to NAPRA, an organization that, at the time, the WWARA felt spoke for the packet community.

The WWARA wanted to be kept advised of packet station coordinations, or at least as they effect those sites that could be construed as repeater sites. Furthermore, NAPRA was to be represented at the WWARA meetings and act as a liaison between the two groups.

Time passed and it became evident that there was no communications, no liaison between the two groups. Where was NAPRA? Indeed, it was nowhere to be found.

A great racket has started to raise it's head on the two meter band. It is Packet Radio. Why is the stuff being heard outside of the normally accepted Racket Radio sub-bands?

It has also come to the attention of the WWARA that the technical standards (RF) recommended by NAPRA are somewhat lacking.

After some deliberation and changing of the guard the WWARA has come to question the wisdom of its actions. Why should there be two Amateur Radio frequency coordinating bodies in Western Washington? Shouldn't one group do the job?

Other questions arise, as well: Is there still a NAPRA? Who represents them? Where are they?

What do we do?

I feel that the job of Radio Frequency Coordination should be in the hands of those most experienced in those matters. I also feel that the matter of packet system design should be in the hands of those most experienced in that area.

I also question whether there is more that one "NAPRA". Who is the official coordinating body of there is more than one packet group?

More than one packet network can exist, as can more than one packet radio group. Radio spectrum is common to all users, however.

I propose that the WWARA be the sole Amateur Radio frequency coordinating body for Western Washington.

I also proposed that the network design be left to NAPRA or other similar group.

I recommend that the WWARA recognize more than one Packet Radio organization unless a number of Packet Radio organizations agree to recognize one group as the Packet Radio system coordinator.

This will require a change in WWARA and NAPRA coordination standards.

I propose that we recommend the following course for Packet Radio coordination.

STEP 1: The applicant must complete the NAPRA or XXX forms.

STEP 2: NAPRA will forward the completed coordination forms to the WWARA for frequency coordination. (WWARA will follow normal protocol for dealing with other systems and out-of-area coordinating bodies)

STEP 3: WWARA will return the completed forms to NAPRA with a notation of coordination or denial. A copy will be retained by the WWARA.

Actual working of our policies should be developed at a WWARA Board meeting.

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902 MHz ATV TRANSCEIVER INTRODUCED ..K7CR

Local Seattle area equipment maker, AEA, has announced their model FSTV-920 fast scan ATV transceiver designed for the 902-928 band. The unit will have two channels with 1 Watt output and the good news (from a spectrum standpoint) is that the unit will use vestigial sideband visual transmission.

The unit will be available the end of this year, for more information contact AEA, 775-7373.

Its not clear yet to what degree we amateurs will be able to use 902, it all depends on the amount of commercial activity, lets hope that ATV will be able to use the band. It's a great location for this mode.

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REPEATER SITE FOR SALE...K7CR

The site of Tacoma's 146.04-64 is for sale. The 250 foot self supporting tower, located at 11th and Grant streets in Tacoma was erected in the late 40's for KTNT-FM (Now KBSG). That station transmitted via an antenna mounted on the tower top. Later the FM antenna was changed to a side mounted model and the top of the tower became the home for the then new Channel 11, KTNT-TV (Now KSTW). After the TV transmitting plant was moved to Port Orchard a pair of 20 foot tower sections were mounted cross wise on the top of the tower and shortly 2-way antennas began to sprout, it was not long before W7ZTG's two meter repeater was on the air.

The Tribune Publishing Company sold out a couple of years ago leaving but a hand full of users of the tower. Now, it's up for sale, including the building that at one time housed one of the pioneer radio and TV stations in this area. Its not clear what will happen to the 04-64 repeater, hopefully the new owners of the site will continue a long tradition.

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FLORIDA REPEATER CHANGE...Westlink

The Florida Repeater Council has changed its bylaws to preclude inappropriate succession of repeater frequencies to those purchasing operating on the air systems. At a recent meeting in Orlando, the board of directors of the FRC enacted a strongly worded new policy that prevents the transfer of channel pairs along with the sale of repeater hardware unless the new system owner agrees to make no significant changes to coverage, operating parameters and user base.

Under terms of the new rules, when the sponsorship of a coordinated repeater changes, the council will re-coordinate the frequency pair to the new sponsor PROVIDING that there have been no modifications to the technical or geographical coordination specifications. If modified specifications are proposed by the new trustee, then they must be compatible with all current coordination policies.

The FRC says that in no event will it guarantee the new system sponsor access to existing coordination, and in those cases where the new system sponsor cannot be re-coordinated under the foregoing guidelines, the existing coordination will revert to the original sponsor, if desired for use with existing coordination specifications. The Florida Repeater Council says that the purpose of this action is to keep frequencies active in a given areas in order to protect system users while at the same time killing the specter of "frequencies for sale" which, in their opinion, is both morally and legally wrong. Under the terms of the new policy, only repeater hardware can be sold out of the area; the operating channels are NOT INCLUDED!!

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FROM OUR VICE CHAIRMAN: Steve Mayes, KA7PMC

As we start into the 90's we have over 50 repeater systems that have joined the WWARA. If your system is in the none paid category this is a reminder to do so. ($10.00/- Calendar year)

Equally as important as paying dues is active participation. The WWARA is based on a democratic premise to coordinate repeater operations and relies on the participation of its members to achieve that. The more ideas that get expressed the better the decision making process is. If you cannot come to meetings put your thoughts in writing and send them in or contribute information to the Coordinator. Make the Coordinator available to the repeater group members you represent so we can get their thoughts too.

We want to continue to be a responsible organization and in order to do so we incur some expenses.

The Coordinator which is mailed to all members, paid or not, meeting places, phone calls, etc. run up a tab. If an amateur that is not directly involved with repeaters can write and thank us for doing a good job, then all the repeater systems in Western Washington should be able support the WWARA since they benefit from having a well run coordinating body.

Remember when paying dues to the WWARA:

1. Make your check payable to WWARA, please don't send cash.
2. Write the FREQUENCY and CALL of your repeater group on the face of your check.
3. Mail your check to the WWARA, or better yet, hand it to the Treasurer at the next meeting!!

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FOR SALE: Rohn 65 G tower, complete. 4-20 ft sections, 1- 10 ft top section, base section, guy wire, anchors, turnbuckles, bolts. Great for that big HF array or for mountain top duty. Had to take it down, new location will not permit guyed tower, self supporting only. Want to sell or trade for ???? call me and lets talk. Clay Freinwald, K7CR. Day work phone 1-800-543-0097 from anywhere in Washington, evening home phone 939-1414.

Got something for sale? Looking for an item? Put it here, in your newsletter. Amateur, repeater related items please....

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NEWS FROM DAYTON....ARRL Letter

For the first time in its 39 year history the Dayton Hamvention has named an ARRL official its Amateur of the Year. The award, made Saturday April 28th at the banquet, went to Steve Mendelsohn, WA2DHF, for his "long and dedicated career of service to the Amateur Radio community"

Mendelsohn was cited for his work in REPEATER COORDINATION (he is past director of the Tri-State Repeater Council in New York)

Some 50 people attended the Repeater Coordinator's forum at this year's HamVention. The meeting was chaired by Mid America Coordination Council (MACC) President Ken Enenback, KC0WX.

According to panel member Jay Mabey, NU0X, editor of the ARRL repeater Directory, the national repeater data base is still a hot topic. The forum's consensus, according to Mabey, was to make the basic NRDB BBS more "user friendly." both to the coordinators and the Sysops.

Also discussed was interaction by coordinators with the FCC in the area of repeater interference problems. Gary Hendrickson, W3DTN, presented a paper outlining several examples of such situations and their possible remedies.

Enenback presented suggestions on the possible formation of an "umbrella coordination group" (NOT a super-coordinator) who would act not only as a moderating group in disputes, but also convey to the FCC that the coordination community is a unified body.

Other topics, according to Mabey, included FCC recognition of frequency coordinators, which doesn't seem likely, at least for the present, and band planning for the future of repeater coordination as the number of repeaters increases.

MICROSAT FREQUENCIES

Here is a list of the frequencies in use by a couple of the new MICROSATS....

BIRD	DOWNLINKS	UPLINKS
AO-16	437.025	145.90
	437.050	145.92
		145.94
		145.96
LO-19	437.150	145.84
	437.125	145.86
		145.88
		145.90

As is the case with all amateur Satellite operations, the operating frequencies should be not be used for relay systems or other direct, earth-bound, communications.

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FCC GENERAL COUNSEL SAYS LOCAL GOVERNMENT RFI REGULATIONS ARE PRE EMPTIED ...ARRL Letter.

The Leagues General Counsel, Chris Imlay has received a letter from the FCC General Counsel verifying that interference matters have been pre-empted by the Federal Government.

In part, the letter from Robert Pettit said...." Congress has pre-empted any concurrent state or local regulation of radio interference pursuant to the provisions of the Communications Act. Sec 47, USC Section 302 (a). Section 302 (a)(1) of the Act provides that the Commission may, consistent with the public interest, convenience, and necessity, make reasonable regulations (1) governing the interference potential of devices which in their operation are capable of emitting radio frequency energy radiation, conduction, or other means in sufficient degree to cause harmful interference to radio communications....' The legislative history of Section 302 (a) provides explicitly that the Commission has exclusive authority to regulate radio frequency interference (RFI). In its Conference Report No. 970765, Congress declared:

The Conference Substitute is further intended to clarify the reservation of exclusive jurisdiction to the Federal Communications Commission over matters involving RFI. Such matters shall not be regulated by local or state law, nor shall radio transmitting equipment be subject to local or state regulation as part of any effort to resolve RFI complaint'

"State laws that require amateurs to cease operations or incur penalties as a consequence of radio interference thus have been entirely pre-empted by Congress"

Ed Note: This action is of particular interest to Amateurs in the Seattle area where local government has for some time made various attempts to limit the emissions of all types of transmitters, including Amateurs.

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PELTS MAY BE IN TROUBLE....K7CR

In a recent issue of the Coordinator we reported on a proposal to establish a Personal ELT system, known as PELTS, to be located in the 220-222 MHz spectrum.

It seems that several manufacturers and organizations have given the proposal a cool reception. L-Tronics (manufacturers of DF equipment for the Amateur market) expressed that the cost of setting up the PELTS system might be prohibitive. Meanwhile NABER (an organization of Commercial radio interests) was a dissenter feeling that the spectrum should be used for land mobile (2-way) communications instead, and, of course, UPS does not like it, they proposed a PELT system using satellites instead.

It seems that the jury is out on who will 'potentially' get to use this spectrum and just how it will be used.

MINUTES
APRIL 7, 1990 GENERAL MEETING - RIVERSIDE INN

THE MEETING WAS CALLED TO ORDER BY CHAIRMAN CLAY FREINWALD - K7CR AT 10:00. INTRODUCTIONS WERE MADE AROUND THE ROOM. THOSE WHO SIGNED THE REGISTER INCLUDE:

STEVE KOMETZ - KC7RO
RUDY VALOR - N7CJM
STEVEN MAYES - KA7PMC
ALLEN HART - N7FYV
AL JOHNSON - W7EKM
PETER DAHL - WA7FUS
KEN RAU - K7YR
CLAUD ANDERSON - AB7G
NANCY MC KIBBIN - KB7BJE
FLEET RATLIFF - N7ICG
JON MARCINKO - W7FHZ
DON ROSE - W7JPH
BOB DONNELL - KD7NM
BUD SOPER - W7BCK
KEN KOSTER - N7IPB
GARETH BOUWMAN - KL7ELD
BOB ST ANDRE - WA7NAN
JAMES KAUFMAN - W7UMH
BUCK STRICKLAND - W7FCH
HERMAN ENTZ - K7PAG
DON WERTZ - N7NKJ
JACK BURRELL - KB7ZS
CHUCK NORTHCUTT - W7SRZ
DOUG LUX - WB6VAC
BILL ROURKE - W7ERH
MARK MC KIBBIN - WR7V
CLAY FREINWALD - K7CR
ROGER HANSEN - W6TOZ
JOHN SPRAGUE - KA7JUR

ITEMS OF NEWS WERE THEN PRESENTED BY CHAIRMAN CLAY:

1) LETTERS OF INTEREST REGARDING THE LEAGUES BAND PLAN INITIATIVE.

2) WESTLINK'S REPORT ON MICROSAT INFORMATION.

3) THE QUESTION OF 216/220 MHz--HAM RADIO vs TV?

4) "220 NOT DEAD!" A REPORT BY STEVE MENDELSON

5) REPORT ON FCC LGS REGULATIONS PREEMPTED.

6) REPORT ON NEW RF DENSITY STANDARD -- THE 1% RULE "NIER" 200 MICRO WATTS/CM²

CALL WAS THEN MADE FOR THE APPROVAL OF THE PUBLISHED MINUETS. WR7V MOVED AND K7YR SECONDED THAT THE MINUETS BE APPROVED AS PUBLISHED. THE MOTION PASSED.

THE CHAIR CALLED FOR THE TREASURERS REPORT.

PREVIOUS BALANCE	911.39
COORDINATORS PRINTING FOR MARCH	<35.00>
SPECIAL MAILING AND NEW RUBBER ADDRESS STAMP	<16.10>
STAMPS FOR COORDINATOR FOR JANUARY	<115.00>
STAMPS FOR COORDINATOR FOR MARCH	<90.00>
INCOME FROM MEMBER DUES	360.00
CURRENT BALANCE	1015.29

K7PAG MOVED AND W7SRZ SECONDED THAT THE REPORT BE APPROVED AS PRESENTED. THE MOTION PASSED.

THERE WERE NO ADJACENT AREA REPORTS. CHAIRMAN CLAY QUESTIONED WHAT WAS GOING ON IN BC AND OREGON. IT DIDN'T SEEM RIGHT THAT NO ACTIVITY WAS BEING REPORTED FROM THESE AREAS.

COMMITTEE REPORTS THEN FOLLOWED:

1) PACKET - REPRESENTATIVE BOB DONNELL REPORTED ONLY THAT NAPRA WAS TRYING TO ORGANIZE FREQUENCY COORDINATION. HE ALSO REPORTED THAT HE HAD A NEW PHONE - 364-6222.

WWARA BOARD MEMBER BOB ST ANDRE, WA7NAN, TOOK THIS OPPORTUNITY TO REQUEST THAT A MEETING BE HELD BETWEEN THE BOARDS OF THE WWARA AND NAPRA TO DISCUSS TOPICS OF MUTUAL INTEREST. IT WAS DECIDED TO HAVE THE MEETING ON THURSDAY, MAY 3, AT THE OMNI RESTAURANT NEAR SEA-TAC TO CONVENE AT 7:30 PM.

2) TECHNICAL COMMITTEE - IN THE ABSENCE OF COMMITTEE CHAIRMAN JOHN MILLER, K7TTQ, SEVERAL INTERFERENCE PROBLEMS WERE DISCUSSED. THE A+B-C INTERMOD PROBLEM ON SPAR POLE HILL WAS ADDRESSED(SEE LAST COORDINATOR FOR DETAILS). W7SRZ DISCUSSED POWERLINE INTERFERENCE HE HAD EXPERIENCED WITH HIS REMOTE BASE OPERATION ON BEACON HILL. PROBLEM REPORTEDLY WAS EMANATING FROM THE MERCER ISLAND AREA AND CURED BY THE POWER COMPANY.

WHILE W7SRZ HAD THE FLOOR, HE WAS ASKED IF HE MIGHT MUTE ANY TOUCH TONES BEING RE-BROADCAST THROUGH HIS REMOTE SYSTEM. HE WAS REMINDED THAT SUCH TONES MAY CAUSE UNWANTED FOUL-UPS IN THE CONTROLS OF OTHER STATIONS OR SYSTEMS, AND WAS ADVISED THAT THIS WAS A SIMPLE FIX WHEN USING MANY CURRENT TOUCH TONE DECODERS NOW AVAILABLE. HE AGREED.

IT WAS ALSO REPORTED THAT THE WESTERN WASHINGTON DX CLUB WAS EXPERIENCING OCCASIONAL INTERFERENCE ON THEIR VHF REPEATER INPUT OF 146.400 MHZ. THE CULPRITS SEEM TO BE SIMPLEX USERS ON 146.420. MAYBE IT'S TIME FOR CTCSS OR A BETTER RECEIVER!

3) MEMBERSHIP COMMITTEE - CHAIRMAN STEVE MAYES, KA7PMC, REPORTED THAT AS OF THAT MORNING, 74 MEMBERS HAD PAID THEIR DUES FOR THE YEAR. HE SUGGESTED THAT A SIMPLE RENEWAL FORM AND ENVELOPE BE INCLUDED EVERY YEAR FOR THE MEMBERS TO SUBMIT THEIR RENEWAL.

4) FCC LIAISON COMMITTEE: - NO REPORT. CHAIRMAN CLAY WONDERED ABOUT GIB'S PARTICIPATION. IT WAS SUGGESTED THAT MAYBE GARY SOULSBY OR JACK BAZSHAW, BOTH HAMS FROM THE FCC, MIGHT BE PERSUADED TO ATTEND OUR MEETINGS AND REPORT ON FCC HAPPENINGS.

5) SIX/TEN METER - CLAY REPORTED NO ACTIVITY AND QUESTIONED THE COORDINATIONS OF W7BMA FOR 6 AND LXQ FOR 10 METERS.

THE LACK OF COORDINATION WERE NOT INTENTIONAL AND HAD NOT CAUSED ANY SERIOUS PROBLEMS

A MOTION TO ALLOW THE MT.BAKER GROUP TO MAKE A UNILATERAL MOVE TO RACE HORSE MOUNTAIN AND BECOME THE PRIMARY OCCUPANT OF THE FREQUENCY DIED FOR LACK OF A SECOND. BEFORE ANY ACTION ON THE MT.BAKER APPLICATION COULD BE MADE, IT WAS DECIDED THAT THE SEATTLE SITUATION MUST BE RECTIFIED. AFTER LENGTHY DISCUSSION BY ALL PARTIES CONCERNED, IT WAS DECIDED THAT IT WOULD NOT BE IN THE BEST INTEREST OF THE REPEATER COMMUNITY TO COORDINATE A DIGITAL REPEATER CO-CHANNEL WITH A VOICE REPEATER AND THE WA7FUS PROPOSAL WAS REJECTED ON THESE GROUNDS.

FINALLY, WR7V MOVED AND W7JPH SECONDED A MOTION TO ALLOW THE MT.BAKER GROUP TO MOVE THE BELLINGHAM REPEATER TO RACE HORSE MOUNTAIN AND TO ALLOW THE APPLICATION FOR COORDINATION OF 145.23 TO W7HIL IN BELLEVUE, ALL SUBJECT TO (1) THE CTCSS RULE 12A, (2) CANADIAN APPROVAL, AND (3) LETTERS OF COOPERATION BETWEEN THE TWO PARTIES REGARDING CO-CHANNEL OPERATION. DISCUSSION ON THIS MOTION INCLUDED QUESTIONS ON RESTRICTING THE COVERAGE OF THE RACE HORSE SYSTEM TO ITS INTENDED NORTHERN AREA AND THE COORDINATION OF CTCSS FREQUENCIES. IT WAS MENTIONED THAT THESE CONCERNS WERE COVERED UNDER THE COORDINATION STANDARDS AND IF REQUIRED, THE WWARA COULD MAKE THESE A REQUIREMENT FOR COORDINATION FOR BOTH PARTIES. THE QUESTION WAS CALLED FOR AND WAS PASSED.

THERE WAS NO FURTHER OLD BUSINESS SO NEW BUSINESS WAS CALLED FOR.

W7FHZ INQUIRED ABOUT THE COORDINATION OF THE 146.86 REPEATER IN OAK HARBOR ON WHIDBY ISLAND. HE MENTIONED THAT IT HAD BEEN OFF THE AIR BUT HAD RECENTLY BEEN RE-BROADCASTING THE 145.33 BOEING GROUPS REPEATER WITHOUT HAVING ANY NORMAL 146.26 INPUT. THE SECRETARY WAS INSTRUCTED BY THE CHAIR TO ASCERTAIN VIA CERTIFIED LETTER THE STATUS OF THE REPEATER WITH THE POSSIBILITY OF RECOORDINATION ON A CO-CHANNEL BASIS.

CHAIRMAN CLAY READ A LETTER FROM RICHARD GIBBS, KA7AEF, FOR A REQUEST FOR COORDINATION AND BAND PLAN INFORMATION. THE CHAIR SUGGESTED A RESPONSE THANKING HIM FOR THE INQUIRY AND TO SEND HIM THE STANDARDS.

CHAIRMAN CLAY WAS ASKED TO COMMENT ON THE STATUS OF THE NEW SIX METER SUB BAND AND THE PROGRESS ON A NEW BAND PLAN. HE DESCRIBED THE BAND PLAN COMMENTS PROPOSED BY OUR OWN LOCAL 6 METER OPERATORS AT A MEETING THEY HELD IN MARCH. HE INDICATED HE HAD PASSED ALONG THE INFORMATION TO THE VRAC AND OTHER COORDINATING BODIES. HE ALSO MENTIONED THAT OUR FRIENDS IN SOUTHERN CALIFORNIA HAD ALSO MET AND EVENTUALLY ADOPTED THERE OWN BAND PLAN WITHOUT ANY GENUINE NATIONAL REFERENDUM ON THE MATTER. CLAY STATED THAT ALTHOUGH THEIR PLAN HAD SOME MERIT, IT WAS TAILORED ONLY TO THEIR PERCEIVED NEEDS AND HE FELT THAT THEIR DECISION WAS PREMATURE. IT IS A WAIT AND SEE SITUATION NOW FOR THE VRAC AND ARRL TO DECIDE. THE SOUTHERN CALIFORNIA PLAN IS STRUCTURED

6) 2 METERS - CANADA HAD PREVIOUSLY REQUESTED TO CO-CHANNEL WITH GENE SCOTT'S 147.22 MACHINE ON WHIDBY ISLAND. GENE REPORTED TO HAVE NO SERIOUS PROBLEMS WITH CANADA'S OPERATION IN CHILLIWACK AS LONG AS TONE WAS TO BE A REQUIREMENT. THE BOARD AGREED TO APPROVE THE REQUEST AS LONG AS NO HARMFUL INTERFERENCE BE CAUSED TO THE WHIDBY ISLAND OPERATION AND CTCSS WOULD BE USED PURSUANT TO SECTION 12A OF THE WWARA COORDINATION POLICIES.

IT WAS REPORTED THAT THE PREVIOUSLY COORDINATED CHANNELS OF 147.12 FOR OLYMPIA AND 145.49 FOR TENINO WERE BOTH ABOUT TO GO ON THE AIR.

7) 440 - WR7V WAS ASKED TO REPORT ON HIS MULTI CHANNEL UHF LINKED REPEATER SYSTEM IN THE SEATTLE.

W7FHZ SPOKE ON THE ALLEGED REPEATER SITE LOSS FOR THE 442.700 OPERATION ON BUCK MOUNTAIN IT WAS RUMORED THAT THERE HAD BEEN A CHANGE OF OWNERSHIP AT THE SITE AND THE REPEATER OWNERS HAD NO OFFICIAL AUTHORITY TO BE THERE. JON COMMENTED ON HOW IMPORTANT IT WAS TO HAVE ALL YOUR SITE ARRANGEMENTS IN ORDER AND IN WRITING WITH THE SITE OWNER AND EXPLAINED WHY THE WWARA COORDINATION POLICIES REQUIRED SITE INFORMATION OF THIS NATURE.

8) 900/1200 - WR7V REPORTED ON A REQUEST FOR COORDINATION FROM W7ISX, TONY SANTOS, FOR A 1200 MHZ STATION ON MOUNT CONSTITUTION.

OLD BUSINESS:

THE MATTER OF COORDINATION OF THE 145.23 REPEATER PAIR TURNED BACK BY KL7BB WAS BROUGHT TO THE FLOOR. SEVERAL DIFFERENT APPLICATIONS HAD BEEN RECEIVED OR PROPOSED.

1) THE MT.BAKER REPEATER GROUP WAS REQUESTING A NEW COORDINATION FOR THIS PAIR ON RACE HORSE MT. NEAR LINDEN. THEY HAD PREVIOUSLY LOST THEIR LOW LEVEL SITE IN BELLINGHAM AND HAD MOVED THE REPEATER TO SOMEONES RESIDENCE IN BELLINGHAM WITHOUT BENEFIT OF COORDINATION.

2) WA7FUS, IN THE NAME OF NAPRA, HAD REQUESTED THIS PAIR FOR A PACKET REPEATER IN THE SEATTLE AREA TO BE LOCATED AT THE BOEING MICROWAVE SITE ON TIGER MOUNTAIN.

3) AND FINALLY, JOHN BLACK, W7HIL, HAD MADE FORMAL APPLICATION TO OPERATE A LOW POWER, CTCSS ONLY REPEATER IN DOWN TOWN BELLEVUE THAT WOULD HAVE DIRECT ACCESS TO THE EASTSIDE 911 CONTROL CENTER.

THE PROCESS STARTED BY DETERMINING WHETHER THE MT.BAKER GROUP COULD APPLY FOR A MOVE OF THE FREQUENCY TO A HIGH LOCATION AFTER THEY HAD PREVIOUSLY MOVED THEIR REPEATER WITHOUT COORDINATION. SEVERAL THOUGHT THAT THE ORIGINAL COORDINATION SHOULD BE REVOKED, BUT IT WAS FINALLY AGREED THAT THEIR EARLIER ACTIONS REGARDING

AROUND THREE SEGMENTS OF REPEATERS WITH A 500 KHZ SEPARATION BETWEEN INPUTS AND OUTPUTS, A SYSTEM SIMILAR TO THE 2 METER BAND.

SECRETARY JON, W7FHZ, SUGGESTED THAT THE EXISTING COORDINATION POLICIES NEEDED TO BE CLEANED UP GRAMMATICALLY, AND HE SUBMITTED AN IMPROVED VERSION FOR INSPECTION BY THE BOARD. HE INDICATED THAT THE GRAMMAR, SPELLING AND STYLE WAS ALL THAT HAD BEEN CHANGED AND THE CONTENT REMAINED THE SAME. AFTER INSPECTION, W7JPH MOVED AND WR7V SECONDED THAT THE NEW REVISIONS BE APPROVED AND NEW COPIES BE SENT OUT TO ALL MEMBERS. THE MOTION CARRIED.

HEARING NO FURTHER NEW BUSINESS THE CHAIR CALLED FOR THE GOOD OF THE ORDER. W7FHZ ASKED FOR A QUICK OPINION REGARDING CROSSBAND OPERATION FROM 2 METER SIMPLEX TO UHF. HE INDICATED THAT HE HAD BEEN ASKED BY A INTERESTED GROUP ON VASHON ISLAND ABOUT BUILDING SUCH A DEVICE TO COMMUNICATE FROM ONE END OF THE ISLAND TO THE OTHER. THE OPINION FROM THE BOARD WAS THAT THIS SHOULD NOT BE A PROBLEM AND WAS LEGAL OPERATION. JON INDICATED THAT THERE WERE SEVERAL LEFT OVER REPEATER HALVES THAT COULD BE USED FOR SUCH SERVICE.

THE GROUP WAS QUESTIONED ABOUT A MEETING PLACE FOR THE NEXT BOARD MEETING AND THE OMNI RESTAURANT WAS SUGGESTED. CLAY SAID HE WOULD INQUIRE OF ITS AVAILABILITY AND REPORT IN THE NEXT COORDINATOR.

W7JPH MOVED AND WR7V SECONDED THAT THE MEETING BE ADJOURNED. IT PASSED.

RESPECTFULLY SUBMITTED
JON MARCINKO - W7FHZ
SECRETARY

WWARA COORDINATION POLICIES

COORDINATION REQUIRES COOPERATION!!!

The WWARA is an organization, the success or failure of which depends upon the cooperation of those it serves. The WWARA is supported by its members, the coordinated systems and system users. Although our repeater sub-bands are a finite resource, they can support a large amount of relay activity if shared in a harmonious manner. All parties must realize that, like the environment, our repeater sub-bands are a fragile resource and abuse can spoil it for everyone. The WWARA needs input from all users of this resource and will function most effectively when all users participate actively in its decision making process. It is a democratic and cooperative association of relay systems and users in Western Washington making coordination decisions for the benefit of the relay community.

GENERAL COORDINATION POLICIES APPLICABLE TO ALL BANDS

1. An applicant for coordination may select or request a certain frequency.

2. An applicant may wish to share a frequency (co-channel) with another system. In these cases, letters of consent from all parties must be filed with the application for coordination.

3. All coordinated frequencies are for a specific:

   A. Frequency(s)
   B. Transmitter location (latitude and longitude)
   C. Effective Radiated Power
   D. Radiation pattern (directional, non-directional, etc.)
   E. Elevation (AMSL, AGL, AAT)
   F. Owner (club or individual)

4. Initial coordination is for a 6 month period. It is the responsibility of the applicant to notify the WWARA immediately when the coordinated frequencies are activated.

5. All applicants for coordination may appeal the coordination decision to the Board and/or membership at the next meeting.

6. Coordination is based on all data available to the coordinator at the time. Coordination is not a guarantee of a clear frequency. The suitability of the coordinated frequency(s) shall be the responsibility of the applicant.

7. It is the responsibility of the coordinated party to keep the WWARA informed as to the status of the system by having an up to date technical data form on file with the secretary at all times.

8. Use of directional antennas may be an essential part of any given coordination.

9. Coordination for a location other than the applicants QTH will be accompanied by a letter or other suitable documentation showing authorization to use said transmission site.

10. Any facility parameter change, as outlined in Section 3, made without prior coordination with the WWARA shall result in decoordination.

11. Coordination of an existing repeater system can be transferred to another individual or group provided:

    A. Both parties are in agreement.
    B. The party wishing said coordination applies to the WWARA for same.
    C. There are no reasonable objections to said transfer.
    D. There will be no changes in the operating parameters of the system per Section 3, A thru E.

12. The WWARA reserves the right to:

    A. Deny requests for coordination in congested bands or require the use of less congested bands.
    B. Set aside frequencies for certain operating modes.
    C. Limit antenna height and ERP.
    D. Require special methods of access as a prerequisite for coordination.

12A. Requirements applicable to 2-Meters: *(Adopted 4-8-89)*

All requests for coordination of New 2-Meter voice repeaters are to be accompanied by a letter from all effected co-channel users agreeing to the proposed co-channel operation. All new 2-Meter coordinations shall use CTCSS or DPL as a means of limiting access if so determined by the coordinating committee as a requirement to mitigate co-channel issues. Systems so coordinated must not only by equipped for CTCSS receiver operation but must transmit CTCSS as well. Other means of limited access like DTMF or Cheap-Beep are not acceptable.

13. The WWARA shall decoordinate relay systems as follows:

    A. For failure to notify the WWARA within 6 months of the initial coordination, or extension thereof, as to the status of the system.
    B. For failure to operate a coordinated system for a period of 6 months without WWARA written approval.
    C. For operation in violation of WWARA coordination policies.
    D. For not operating in accordance with established band plans.
    E. For any system known to be operating in violation of FCC rules.

14. On bands where coordinatable frequencies are available, coordination requests shall be acted upon on a first come, first serve basis.

15. In the case of mutually exclusive applications for coordination, the WWARA shall weight its decision based on the following:

    A. Duplication of coverage of an existing system on the same band.
    B. Coverage of an unserved area.
    C. Potential for interference.
    D. Number of existing coordinated systems operated by applicant.
    E. Proposed operation of an open rather than a closed system.

16. All communication regarding coordination shall be in writing. Verbal communication shall not be binding. All correspondence to the WWARA requiring verification shall be made by Certified Mail. Informal communications with WWARA officials is encouraged.

17. The WWARA recognizes the ARRL band plans for the following:

    A. 10 Meters
    B. 6 Meters
    C. 220 MHz.
    D. 440 MHz.
    E. 900 MHz.
    F. 1200 MHz.

    On 2 Meters, the 20 KHz. band plan is standard.

18. The WWARA does not coordinate, channelize, or attempt to create band plans for simplex frequencies falling outside the area reserved for repeater inputs or outputs. (Modified 4-8-89)

19. The following is the WWARA policy regarding Packet Radio Systems: (Adopted 4-8-89)

    A. The WWARA shall not attempt to coordinate any Packet Radio systems, except when the proposed system requires:

        1. use of a standard repeater pair.
        2. use of spectrum previously and/or historically coordinated for non-packet relay systems lying outside of established and recognized Packet Radio spectrum.

    B. The WWARA shall protect existing co-site and adjacent frequency repeaters from the effects of system performance degradation caused by Packet Radio Systems. Conventional FCC interference criteria will be used to determine degradation.

    C. The Board shall appoint a Packet Liaison. This persons responsibility shall be to keep the WWARA informed of Packet Radio activity as it affects the WWARA.

    D. The WWARA shall work with the ARRL, regional coordination organizations, as well as local and regional Packet Radio organizations in the development of band plans that will set out specific frequency <u>BANDS</u> for Packet Radio communications.

    E. The WWARA may recognize an entity that assumes the role of Packet spectrum management/coordination, and whom is clearly demonstrated to have the popular support of the majority of Packet Radio users in Western Washington.

    F. The WWARA shall not make any attempt to "list" or otherwise recognize any DIGI/Packet system and/or frequency of operation in its data base or publications other than those systems that utilize standard band plan frequencies and have been coordinated.

20. RESERVED

21. The boundaries of the WWARA coordination responsibility are:

North...The US Boarder
East...The Cascade Crest
South...Roughly the Lewis and Columbia Rivers
West...The Pacific Ocean

22. The following are guidelines for sharing repeater pairs:

A. Harmful interference is that which seriously degrades, obstructs, or repeatedly interrupts the operation of a relay system. Hearing the output of another co-channel repeater on the output frequency of a system not in use is not interference.
B. Overlap is based on a 25 watt or less mobile using a gain antenna bringing up more than one system over a large area.
C. No fixed mileage separation criteria can be used between co-channel or adjacent channel systems.
D. Receiver coverage of a repeater is a large factor in determining the coverage of a system. Those systems with a number of voting receivers, receivers at elevations higher than the repeater transmitter, or systems operating with excessive transmitter power will not have extended coordination protection.
E. Repeater DX'ing by users may cause unintended interference to co-channel systems but is not a matter for WWARA action.
F. New systems proposing co-channel operation with an existing established system shall demonstrate to the WWARA how its operation will not adversely effect the operation of the prior user(s) of the frequency. *(Ref. 22 [A])*

23. The WWARA has established several Shared Non-Protected (SNP) repeater pairs. SNP systems will not be deemed coordinated systems. Guidelines for use of these frequencies are:

A. All users of these frequencies shall share the use of same.
B. Users receive no protection from other co-channel users.
C. All systems shall use CTCSS access or other approved method of limited access. <u>No COR operation of any kind is permitted.</u> The WWARA shall make a good faith effort to keep track of the CTCSS codes in use to avoid duplication and to make this information available to all those requesting same.
D. Operation of SNP systems shall be on a non-interference basis with existing coordinated systems.
E. Use of SNP frequencies shall be restricted to voice, non-data modes.
F. The SNP pairs using standard frequency pairing are:
2-Meters.....144.53-145.13 and 144.69-145.29
220 MHz.....223.12-224.72 and 223.24-224.84
440 MHz.....445.00-440.00 and 448.00-443.00
G. Power limitations (elevations in AMSL, Power is ERP in watts)
0-500' .....20 Watts
500-1000'...10 Watts
Over 1000' may be approved on case by case basis by the WWARA

(Adopted 4-2-88)

24. The following 440 MHz frequencies have been reserved for control link applications: 441.500 to 441.600 and 446.500 to 446.600 The CTCSS Code shall be assigned by the 440 MHz coordinator.

PROCEDURES FOR COORDINATION OF A FREQUENCY(S)

1. The applicant submits, in writing, a request to the Secretary.

2. Secretary responds with:
   A. A cover letter
   B. A technical data form.
   C. A copy of coordination standards/policies statement.

3. The applicant returns a completed technical data form and other supporting information to the secretary.

4. The secretary forwards the application to the band coordination committee.

5. The coordination committee recommends a frequency and other parameters, considering the effects on adjacent areas.

6. In the event that the entire Board must act as the Band Coordination Committee or when unresolved issues are involved, the matter will be discussed at the next meeting of the WWARA.

7. The secretary notifies the applicant and the applicable adjacent area by mail as to the result of the Associations action.

THE WWARA NEWSLETTER

Approximately 6 times a year the WWARA publishes a newsletter called the COORDINATOR. This publication is mailed to all designated representatives for each coordinated system and to user members for the year in which their dues are paid. The dues are established by the membership and are for a calendar year. ie January 1 thru December 31. Present dues are $10.00.

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